

ABSTRACT

**CURRENT SOURCE FOR CRYPTOGRAPHIC
PROCESSOR**

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To provide increased security against differential power analysis attacks, a data processing device is provided with a current converter that draws current from an external supply and cyclically apportions drawn current between a charge storage device and a processor such that the drawn current varies independently of the instantaneous power demand of the processor. The data processing device includes: a processor; a charge storage device coupled to the processor; and a current source for supplying the processor with operating current, and adapted to vary its output current independently of the instantaneous power demand of the processor.

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[Fig. 1]